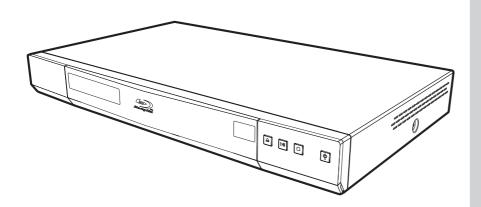


O!PLAY Blu-ray/HD Media Player BDS-700/BDS-500

Owner's Manual





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O!PLAY Blu-ray/HD Media Player BDS-700/BDS-500 Owner's Manual

Original Issue: August 2011

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Record the model number, serial number, purchase date, and place of purchase information in the space provided below. The serial number and model number are recorded on the label affixed to your player. All correspondence concerning your unit should include the serial number, model number, and purchase information.

O!PLAY Blu-ray/HD Media Player BDS-700/BDS-500

Model Number:	
Serial Number:	
Purchase Date:	
Place of Purchase:	

All trademarks and registered trademarks are the properties of their respective companies.

1 NOTICE



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Cautions and Warnings

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

CAUTION: Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and openings in the system are provided for ventilation and to ensure reliable operation of the product and to protect it from over heating. The openings shall be never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product shall not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instruction has been adhered to.

■ Safety Information





CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to anyone.

Laser compliance statement

The optical drive in this player is a laser product. The optical drive's classification label (shown below) is located on the drive.



CAUTION: CLASS 3B VISIBLE OR INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.

■ Important Safety Instructions

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. The apparatus shall not be exposed to dripping or splashing and that no object filled with liquids, such as vases, shall be placed on the apparatus.



Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

- The player shall be connected to a mains socket outlet with a protective earthing connection.
- 17. An appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

FCC Statement



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning! This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is

operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

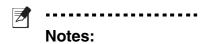
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Introductions

Playable Discs

Туре	Disc Logo	Type Detail
Blu-Ray Disc*	6)	BD-Video
	Blu-ray Disc	BD-R, BD-RE,BD-ROM
	Blu-ray Blu-ray TM	3D BD-Video
DVD Disc	VIDEO	DVD-Video
	RW DVD+R RW DVD+ReWritable	DVD-ROM, DVD+R, DVD-R, DVD+RW, DVD-RW
CD Disc	COMPACT CISC DIGITAL AUDIO	Audio CD
	COMPACT DIGITAL AUDIO RECORDISE REWITABLE	CD-R, CD-RW, CD-ROM



- order to download MP3 / WMA files and music from the Internet. ASUS has no right to grant such permission. Permission should always be sought from the copyright owner.
- 2. Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version.
- 3. Depending on the recording software & the finalization, some recorded discs (CD-R/RW, DVD±R/ RW, BD-R/RE) may not be playable.
- 4. BD-R/RE, DVD±R/RW and CD-R/RW discs recorded using a personal computer or a DVD or CD Recorder may not play if the disc is damaged or dirty, or if there is dirt or condensation on the player's lens.

- 1. Customers should note that permission is required in 5. If you record a disc using a personal computer, even if it is recorded in a compatible format, there are cases in which it may not play because of the settings of the application software used to create the disc. (Check with the software publisher for more detailed information.)
 - 6. This player requires discs and recordings to meet certain technical standards in order to achieve optimal playback quality.
 - 7. Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/RW) disc itself, some CD-R/ RW (or DVD±R/RW) discs cannot be played on the unit.
 - 8. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA files) and these require certain pre-existing conditions to ensure compatible playback.

•••••

Note: See "File Format Support and Limitation" on page 37 for more details on limitations.

USB External Storage

Supported: USB Mass storage class devices. Max. 1 Ampere current supply for each USB port.

File System

Supported: FAT16, FAT32, NTFS, EXT3.

AV File Formats

Supported: Avi, DivX, Mkv, Ts (m2t), Mt2s (.mts), Mpg, Vob, Mpeg, Wmv/Asf, Mov, Mp4, 3gp, M4v, Flv, Rmvb

Audio File Formats

Supported: Mp3, Wma, Flac, Aac, Ogg, Wav, Ac3, Mka, Aiff, M4a, Dts

Picture File Formats

Supported: Bmp, Jpg, Jpeg, Png, Gif, Tif, Tiff

Subtitle File Formats

Supported: PGS, Sub+IDX, Smi, Srt, Ssa

ISO file and Others

Supoprted: BD-ISO, DVD-ISO (vob+ifo), file folder playback as ISO with BD/DVD folder (BDMV/ Video_TS folder inside)

Disc Support BD Media

Supported: BD-Rom, BD-RE SL, DL, BD-R SL, DL BD Profile supported: 1.0/1.1/2.0/5.0 (3D)

Disc Support DVD Media

Supported: DVD-Video SL/DL, DVD-R DL, DVD-RW, DVD+R/DVD+R DL

Disc Support CD Media

Supported: CD-DA, CD-R/CD-RW

Others

Supported: AVCHD, BD managed copy disc

AVCHD

AVCHD (Advanced Video Codec High Definition)

This player can playback AVCHD format discs.
 These discs are normally recorded and used in camcorders.

- The AVCHD format is a high definition digital video camera format.
- The MPEG-4 AVC/H.264 format is capable of compressing images at higher efficiency than that of the conventional image compressing format.
- Some AVCHD discs use the "x.v.Color" format.
- This player can playback AVCHD discs using "x.v.Color" format.
- Some AVCHD format discs may not play depending on the recording condition.
- AVCHD format discs need to be finalized.
- "x.v.Color" offers a wider color range than normal DVD camcorder discs.

AVCHC and AVCHD logo are trademarks of Matsushita Electronic Industrial Co., Ltd. And Sony Corporation.

DivX® Plus HD



DivX Plus HD was launched in 2009 and is the brand name for the file type that DivX, Inc. has chosen for their high definition video format. DivX Plus HD files consist of high definition H.264/MPEG-4 AVC video with surround sound Advanced Audio Coding (AAC) audio, wrapped up in the openstandard Matroska container, identified by the .mkv file extension. DivX Plus HD files leverage and extend on Matroska's ability to support multiple language tracks, subtitles, chapters, and additional bonus content.

DivX® Plus HD Profile

DivX has defined profiles which are subsets of MPEG-4/AVI and H264/MKV standards. Because the grouping is a specific subset of what is in the standards, there are certification processes for each of the profiles that device manufacturers must follow.

All DivX Plus HD certified devices bearing a DivX Plus logo will adhere to the profile outlined in the table below, as would any tools that support the DivX profiles. DivX Plus HD devices are also tested for compliance against the DivX HD 1080p profile for MPEG4/AVI certification in order to maintain backwards compatibility.

Profile	+HD 1080p
Codec	MPEG4 part 10 (H.264)
File Extension(s)	.mkv
Max. resolution (pxxpxxHz)	1920×1080×30, 1280×720×60
Max VBV bit rate (bit/s)	VCL: 20000000, NAL: 24000000
Min. VBV buffer size (KiB)	VCL: 3200, NAL: 3840
Macroblocks (per second)	244800
Subtitles	8×SRT, SSA
Audio	8×MP3,AC3,AAC

Compatibility Note

Because BD-ROM is a new format, certain disc, digital connection and other compatibility issues are possible. If you experience compatibility problems, please contact ASUS Customer Service Center.

Viewing high-definition content and upconverting standard DVD content may require a HDMI-capable input or HDCP capable DVI input on your display device.

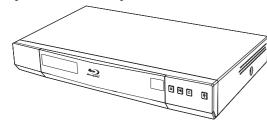
Some BD-ROM and DVD discs may restrict the use of some operation commands or features. Dolby TrueHD, Dolby Digital Plus and DTSHD are supported with maximum 7.1 channels if you use HDMI connection for the audio output of the unit.

3 Parts And Control

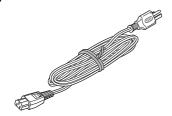
Opening the Box

Please check if the following items are inside the box:

Blu-ray/HD Media Player



Power Cord



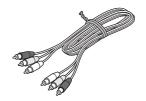
Remote Control



AAA Battery x 2



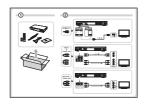
Audio/Video Cable



Owner's Manual



Quick Start Guide

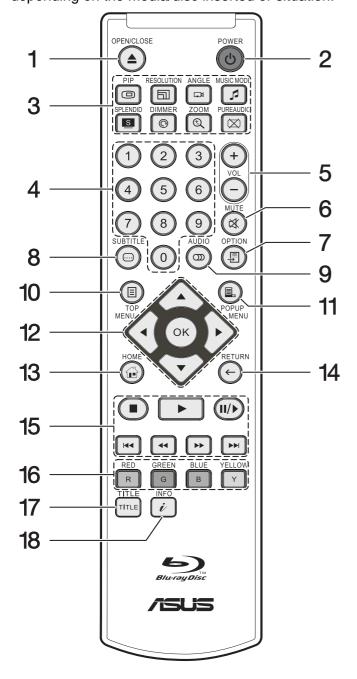


Warranty Card



The Remote Control

The available functions of the remote control differ depending on the media/disc inserted or situation.



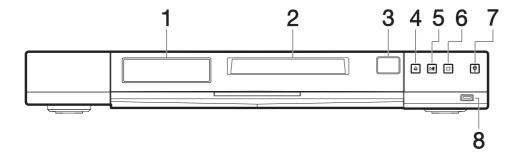
No.	lcon	Descriptions
1	▲	[OPEN/CLOSE] Open or closes the disc tray.
2	(4)	[POWER] Toggles between power on and standby.
3	0	[PIP] Turns on/off Bonus view PIP/SAP. See "PIP" on page 23 for more information.

No.	lcon	Descriptions
	a	[RESOLUTION] Switch output resolution. See "Resolution" on page 23 for more information.
		[ANGLE] Changes camera angle. See "Angle" on page 23 for more information.
	Ţ	[MUSIC MODE] Select EQ modes. See "Music Mode" on page 23 for more information.
		[SPLENDID] Selects scene modes. See "Splendid" on page 23 for more information.
	(O)	[DIMMER] Turns on/off theLCD Display. See "Dimmer" on page 23 for more information.
	(0)	[ZOOM] Change zoom in and out level of display frame. See "Zoom" on page 23 for more information.
		[PURE AUDIO] Turns off video output (HDMI may output black). See "Pure Audio" on page 24 for more information.
4		0~9 Numeric buttons: Enters the title/chapter numbers, etc.
5	+ VOL	[VOL] Adjust the volume of the display.
6		[MUTE] Turns off audio output.
7		[OPTION] Turns on the option menu. Different file formats have different options.
8	<u></u>	[SUBTITLE] Change or turn off subtitle language. Press this button 2 times within two (2) seconds to switch between subtitle tracks when viewing DivX encoded video.
9		[AUDIO] Changes audio languages or channels.
10	([TOP MENU] Invoke Blu-ray top menu or DVD title menu.
11		[POPUP MENU] Invoke Blu-ray Pop up menu or DVD title menu.

No.	lcon	Descriptions
12		Move the highlight to select displayed item. Note: The up, down, left and right direction keys will be represented by $\uparrow, \downarrow, \leftarrow, \rightarrow$ symbols in the instructions.
	ОК	Confirmation of selected item in menu.
13		[HOME] Go to Home Menu of the player.
14	©	[RETURN] Back to previous menu or mode.
15		[STOP] Stop playback.
	•	[PLAY] Play selected media.
	(11/)	[PAUSE] Pause selected media.
	144	[PREVIOUS] Skip to previous track of chapter.
	44	[REVERSE] Fast reverse playback.
	>>	[FORWARD] Fast forward playback.
	 	[NEXT] Skip to next track or chapter.
16	RED R GREEN G BLUE B YELLOW Y	Shortcut keys for interactive functions based on contents.
17	TITLE	[TITLE] Only applicable with DivX file format. During playback of a file with multiple titles or editions, pressing TITLE button will start playback of the next title or edition
18	i	[INFO] Show media playback status informations.

The Blu-ray/HD Media Player

■ Front Panel



No.	Item	Description
1	LCD Display	Displays status of the player.
2	Disc Tray	Place disc on the tray to play.
3	IR Receiver	For receiving signals from the remote control.
4	Eject	Eject the disc from the player.
5	Play / Pause	Start and pause playback.
6	Stop	Stop playback.
7	Power Switch / Power Indicator Light	Turn player on or off. Blue: On Red: Standby
8	USB Port	Connects to an external device with USB connector like an external hard drive, flash drive, or USB Wi-Fi network adapter (BDS-500 only). Maximum current output is 1 Ampere.

■ LCD Display

Icons	Descriptions	Icons	Descriptions
REPEAT	Lights up when user enables the Repeat function. See "Under Disc, Video and Music Playback" on page 21 for more information.	CD Z	Lights up when Audio CD is present.
RANDOM	Lights up when user enables the Random function. See "Under Disc, Video and Music Playback" on page 21 for more information.	USB	Lights up when an USB storage device is recognized.
>	Lights up during playback.	HDMI	Lights up when a HDMI device is detected.
	Lights up when a disc is present.	П	Lights up during pause.



Lights up when BD-Video is present.

DIGITAL DIGITAL 5.1CH

Lights up when system detects Dolby Digital or Dolby Digital 5.1/6.1 audio file and starts playback.

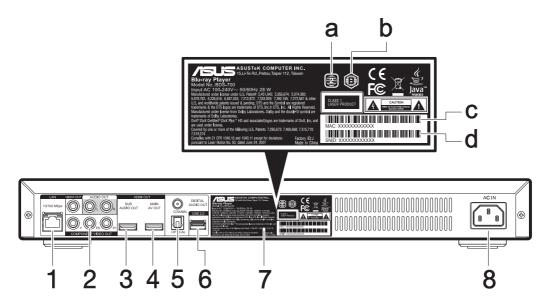


Lights up when DVD-Video is present.

dts 5.1CH **dts** 7.1CH

Lights up when system detects DTS, DTS 5.1 or DTS 7.1 audio file and starts playback.

Rear Panel



No.	Item	Description
1	LAN Port	Connects to a LAN cable.
2	Component and Composite Ports	Y, Pb, Pr, Yellow, Red and White connectors for video and audio left/right output.
3	HDMI Sub Audio Out	Connects to Audio only HDMI input devices. Available only for BDS-700 model.
4	Main AV Out	Connects to HDMI input devices such as LCD TVs or Audio Video Receiver (AVR).
5	Audio Ports	Digital audio output ports for coaxial and optical input devices such as surround sound systems.
6	USB Port	Connects to an external device with USB connector like an external hard drive, flash drive, or USB Wi-Fi network adapter (BDS-500 only). Maximum current output is 1 A.
7	Label	Contains the following: a. DVD region code b. BD region code c. MAC address of your player d. Serial number of your player
8	AC-In	Power cable which connects to a wall outlet.

4

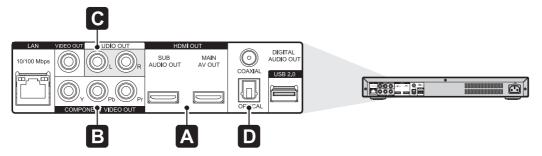
Installation

Connecting the Blu-ray/HD Media Player

?

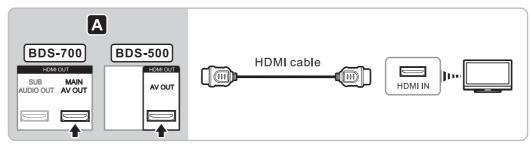
Tip: Do not plug the AC power cord into the power socket until you have made all the necessary connections.

Note: The model used in the illustrations below is BDS-700. BDS-500 has only one HDMI port (A/V out).

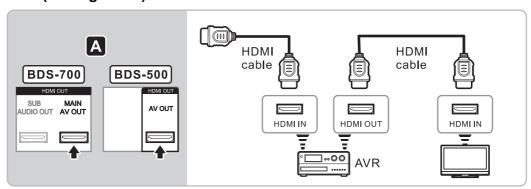


Connecting the player to your display

HDMI connection (Direct to Display):

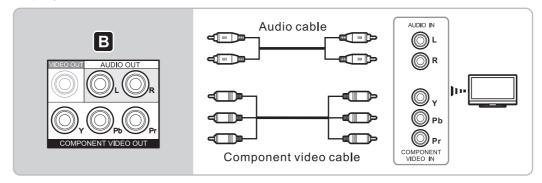


HDMI connection (Through AVR):

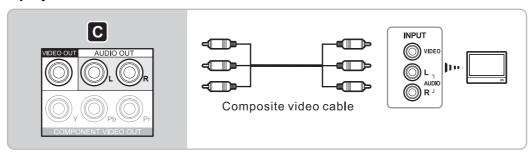


Note: If your AVR does not support HDMI version 1.4, the 3D-BD contents may not be displayed. To remedy this problem, see "Separated HDMI audio and video connection (BDS-700 only)" on page 11.

Component display with audio connection:



Composite display with audio connection:

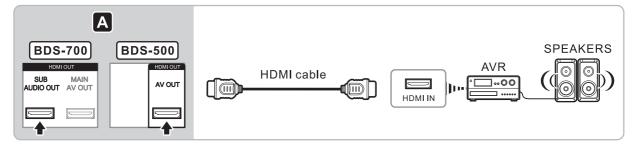




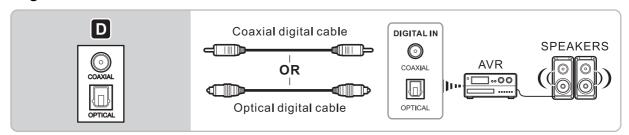
Note: Component and Composite video output resolution might be restricted depending on the contents. See page 35 for more information.

Connecting your player to your AVR

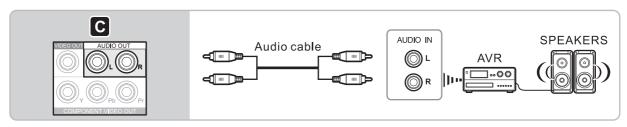
HDMI connection



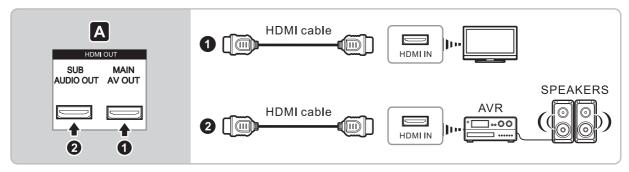
SPDIF Digital audio connection



Analog audio connection

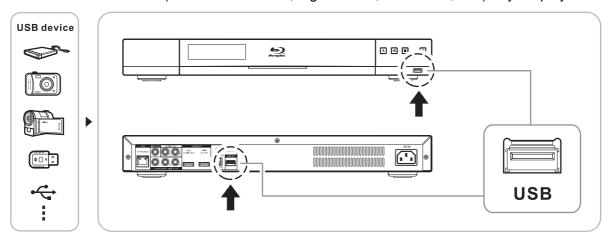


Separated HDMI audio and video connection (BDS-700 only)

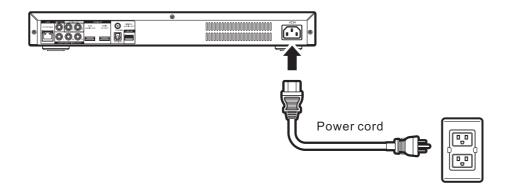


■ Connecting a USB device

You can connect a USB device (external hard drive, digital video, flash drive, etc.) to your player.

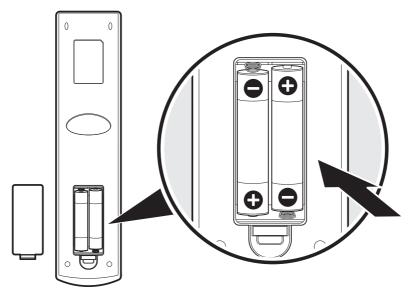


■ Connecting the AC power cord



Preparing the Remote Control

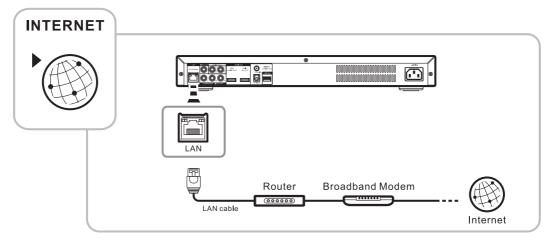
Insert two (2) size AAA batteries by matching the + and - ends on the batteries to the markings inside the battery compartment.



Network Connections

■ Wired Network Connection

For wired network connection, connect one end of the LAN cable (RJ45) to the router and the other end to your player.



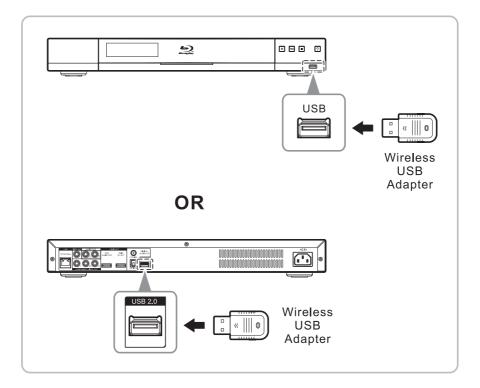
Wireless Network Connection

Your player is also equipped with a wireless LAN which can connect to a wireless router.



Notes: The model BDS-700 comes with a wireless capability built into the player. The model BDS-500 have a recommended optional USB wireless adapter which you can purchase from authorized ASUS dealer. The recommended wireless USB adapter for the BDS-500 are ASUS Wireless USB Adapter USB-N10 and USB-N13.

When connecting the wireless USB adapter to the BDS-500, you can either connect it to the front or back USB connectors.





Note: See user's manual of your router and/or broadband modem for more information on how to connect to the internet.

Getting Started

Easy Setup Wizard

After making sure that you have properly set up the all the required connections, you can now power on the player.

If this is the first time to power on the system, do the following.

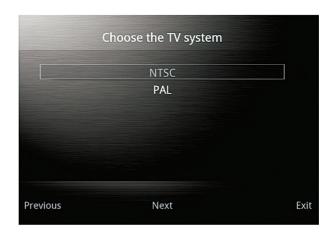
- 1. Turn on your TV.
- 2. Turn on your player by pressing the power. The power indicator lights blue indicating that the player is turned on or has power.
- Point the remote control at the player and press POWER. The Easy Setup Wizard screen will be displayed. Press Run to continue or Exit to leave the Setup Wizard.



4. Select your preferred language for the onscreen display menu and press **Next.**



Select the TV system of your output display and press Next.



6. Select the output resolution and press Next.



- Auto (HDMI Only) Choose this option if your player is connected to an HDMI output device.
- 480i... 1080p Outputs 480i to 1080p video signals. Please refer to your display device manual for the resolutions supported.
- 7. Select the aspect ratio of your screen and press **Next**.



- 4:3 Letter Box Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
- 4:3 Pan Scan Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your

TV screen. Both sides of the pictures are cut off.

- 16:9 Wide Select when a 16:9 wide TV is connected. The 4:3 picture is adjusted horizontally (in a linear proportion) to fill the entire screen.
- 16:9 Wide Auto Select when a 16:9 wide TV is connected. The 4:3 picture is displayed with an original 4:3 aspect ratio, with black bars appearing at the left and right sides of the pictures.



Note: Please refer to your display device manual for the aspect ratios supported.

8. Select the audio setting and press Next.



- Primary Pass Through if your audio output device (i.e. amplifier) supports the pass through function.
- PCM Multi Ch. If your Pulse Code Modulation (PCM) support Multiple Channel. See "Speaker Setup (Under PCM Multi-channel mode)" on page 36 for more information.
- PCM Stereo Select this item if you connect this unit's HDMI Out or Digital Audio Out jack to a device with two-channel digital stereo decoder.

See "Audio Output Resolution" on page 35 for more information.

9. Press **OK** to confirm your settings. Press **Previous** to return to the previous menu.



The Home menu will show the screen shot below:



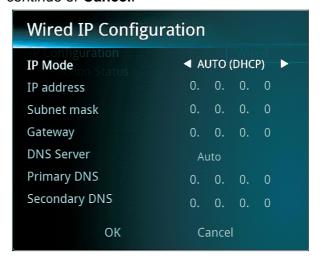
Network Setup

Wired Network Setup

If you have a DHCP (Dynamic Host Configuration Protocol) server (can be a computer, router, access point, etc.) on a LAN (Local Area Network), you must configure it in order to use the wired network. See your server's manual on how to configure it.

After you have finished the configuration, see page 12 for more information on network connection.

- 1. Use the navigation buttons and navigate to the **Setup** menu and press **OK**.
- 2. Navigate to the **Network** menu and press \rightarrow .
- 3. Select the **IP Configuration** and press \rightarrow .
- 4. Select Wired and press OK.
- A dialog box asking "The new setting resets the existing one. Continue?". Press Yes to continue.
- 6. In the "Wired IP configuration", you can choose AUTO or Manual to set your setting. Press **OK** to continue or **Cancel**.



7. Navigate to the **Connection Status** to view your connection status.

Wireless Network Setup

If your player is equipped with a wireless LAN (BDS-700) or wireless USB adapter (optional for BDS-500), you must configure your wireless access point or router to connect to a wireless network. See your wireless access point's user's manual for more information.

After you have finished the configuration, follow the instructions below to finish the wireless network setup.

- 1. Use the navigation buttons and navigate to the **Setup** menu and press **OK**.
- 2. Navigate to the **Network** menu and press \rightarrow .
- 3. Select the **IP Configuration** and press \rightarrow .
- 4. Select Wireless and press OK.
- 5. A dialog box asking "The new setting resets the existing one. Continue?". Press Yes to continue.
- 6. The Access Point screen will be displayed. Choose the router you need to connect, then enter the password for the router using the on screen keyboard. Press Enter on the keyboard after you have enter the password.



- 7. In the "Wireless IP Configuration", you can choose AUTO or Manual to set your setting. Press **OK** to continue or **Cancel**.
- 8. Navigate to the **Connection Status** to view your connection status..

General Operation

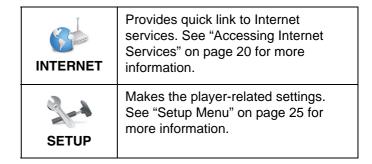
Home Menu Overview

The player's intuitive and easy to navigate onscreen menus allow for simple and easy operation. During normal operation, press **HOME** on the remote control to display the Home menu screen.



There are six main categories on the Home menu screen. Use the navigation buttons on the remote control to highlight an icon and press **OK** to select.

lcon	Description
MEDIA	Press play to start the playback of BD-Video, DVD-Video and Audio CD in your player.
VIDEO	Displays all video files from an external storage device. See "Playing Video Files" on page 18 for more information.
РНОТО	Displays all image files from an external storage device. See "Playing Photo Files" on page 18 for more information.
MUSIC	Displays all audio files from an external storage device. See "Playing Music/Audio Files" on page 19 for more information.



Playing BD-Video/DVD-Video/Audio CD Disc

When a disc is inserted into the player, it will ask you if you want to play the disc. When a disc is already in the player, press **PLAY** to play the disc.

The Disc menu will display the kind of disc that is inserted into the player. Example, if a Blu-ray disc is inserted, the Disc menu will show "Blu-ray" in the menu.

■ Enjoying BD-LIVE



Some BD-ROMs with the "BD-LIVE" logo have bonus content and other data that can be downloaded for enjoyment.

Prepare for BD-LIVE

- 1. Connect the player to a network. See page 12 for network connection.
- 2. Go to "Setup Menu" on page 25, then to the Playback. Set the BD-LIVE connection to **Permitted**.
- 3. Download the BD-LIVE content. The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

■ Enjoying Blu-ray 3D



You can enjoy a Blu-ray 3D Disc with the "Blu-ray 3D" logo.

Prepare for Blu-ray 3D Disc playback

- Connect the player to your 3D-compatible display device using a High Speed HDMI cable. You can turn off the 3D feature of a video. See "Video" on page 26 for more information.
- 2. Insert the Blu-ray 3D disc. The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

■ Region Code

This player will only play BD-Video or DVD-Video set to "All" or with the same region code as the label in your player. See "Rear Panel" on page 8 for the exact location of the label.

Playing Video Files

The player allows you to browse and play videos and movies stored on an external storage device including external storage device, data disc, DLNA server. See "DLNA operation" on page 25 for more information on DLNA server.

■ To access video files in the Video menu:

- On the Home menu screen, use the arrow keys to navigate to the VIDEO icon. A list of connected devices, if any, will be displayed.
- Use the arrow keys to select the connected devices and press **OK** to select. A list of folders or video files that are in the connected device will be shown.
- Navigate to the video you want to view and press OK to play. See "File Format Support and Limitation" on page 37 for more information on supported files.



No.	Description
1	Available devices including external storage devices, data disc, and DLNA server connected to the player. See "DLNA operation" on page 25 for more information.
2	Video files that are available in the selected connected device. The highlighted file (the one with the white square) is the selected file.
3	Preview of the selected video file. File preview are not supported by some files.
4	Information of the selected video file.
5	Ascending or descending order options (A-Z or Z-A). Press the green button G on the remote control to invoke this option.
6	List or thumbnail view option. Press the red button R on the remote control to invoke this option.

■ File Folder Playback

When you navigate to a file folder with a BDMV/ Video_TS files, just press **Play** on your remote control and it will playback just like a BD or DVD disc.

Playing Photo Files

The player allows you to browse and view photos stored on an external storage device including external storage device, data disc, DLNA server. See "DLNA operation" on page 25 for more information on DLNA server.

■ To access photo files in the Photo menu:

- On the Home menu screen, use the arrow keys to navigate to the **Photo** icon. A list of connected devices, if any, will be displayed.
- 2. Use the arrow keys to select the connected devices and press **OK** to select. A list of folders or photos that are in the connected device will be shown.

 Navigate to the photo you want to view and press OK to start viewing it. See "File Format Support and Limitation" on page 37 for more information on supported files.



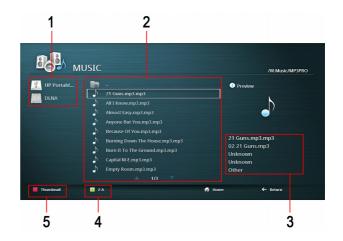
No.	Description
1	Available devices including external storage devices, data disc, and DLNA server connected to the player. See "DLNA operation" on page 25 for more information.
2	Photo files that are available in the selected connected device. The highlighted file (the one with the white square) is the selected file.
3	Preview of the selected photo file. File preview is not supported by some files.
4	Information of the selected photo file.
5	Ascending or descending order options (A-Z or Z-A). Press the green button on the remote control to invoke this option.
6	List or thumbnail view option. Press the red button R on the remote control to invoke this option.

Playing Music/Audio Files

The player allows you to browse and listen to music files stored on an external storage device including external storage device, data disc, DLNA server. See "DLNA operation" on page 25 for more information on DLNA server.

■ To access music files in the Music menu:

- On the Home menu screen, use the arrow keys to navigate to the **Music** icon. A list of connected devices, if any, will be displayed.
- Use the arrow keys to select the connected devices and press **OK** to select. A list of folders or music files that are in the connected device will be shown.
- Navigate to the music file you want to listen and press OK to play. See "File Format Support and Limitation" on page 37 for more information on supported files.



No.	Description
1	Available devices including external storage devices, data disc, and DLNA server connected to the player. See "DLNA operation" on page 25 for more information.
2	Music files that are available in the selected connected device. The highlighted file (the one with the white square) is the selected file.
3	Information of the selected music file.
4	Ascending or descending order options (A-Z or Z-A). Press the green button G on the remote control to invoke this option.
5	List or thumbnail view option. Press the red button on the remote control to invoke this option.

Accessing Internet Services

The player is fully integrated with the most popular Internet services. You can use the player to access radio, music, videos and pictures from any of the following Internet content providers.





Note: Before you can use these services, make sure a network connection has been established. See "Network" on page 27 for more information.

Youtube

To access Youtube

- 1. Use the arrow keys to navigate to the Internet icon; then select Youtube and press **OK**.
- 2. The Youtube page will be shown with the most popular video at the moment on the front page.



Notes: You can also search for videos that are available on the website by using the search menu. If you have an account on Youtube, you can sign in to access your account. You can set the filters for videos, set the Language and Region by going to the Settings menu.

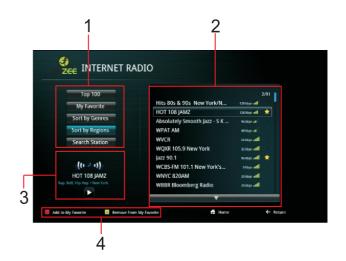


No.	Description
1	Search bar for searching videos available on YouTube. Press OK to invoke the on screen keyboard or use Smart phone as remote control to input text. See "Smartphone Remote Controller" on page 24 for more information.
2	Available videos on the selected category.
3	Categories of videos.

Internet Radio

To access Internet Radio

Use the arrow keys to navigate to the Internet icon; then select **Radio** and press **OK**.



No.	Description
1	Categories of radio.
2	Available radio channels on the selected category.
3	Status of the selected radio channel.
4	Options to add or remove my favorite.

Picasa

To access Picasa

Use the arrow keys to navigate to the Internet icon; then select Picasa and press **OK**.



No.	Description
1	Picasa menu items.
2	Available pictures uploaded to your Picasa account.
3	Options available for your pictures.



No.	Description
1	Flickr menu items.
2	Available pictures uploaded to your Flickr account.
3	Options available for your pictures.

Flickr

To access Flickr

Use the arrow keys to navigate to the Internet icon; then select Flickr and press **OK**.

If you have an existing Flickr account, you have to get an authorization code from the Flickr website before you can access it on your player. Please visit: http://www.flickr.com/auth-72157626087429922 to get an authorization code. Type this authorization code into the player.



Note: If you log out of your Flickr account on the player, you cannot use the authorization code to log it again. You have to get a new authorization code in order to log in to your account. To save you the trouble of getting an authorization code again, it is recommended that you don't log out of your Flickr account on the player unless necessary.

Option Menu 🗐



When you press the option button on the remote control, depending on the disc or file being played, a dialog box will be displayed on the screen with items that are relevant to the disc or file being played.

Under Disc, Video and Music **Playback**

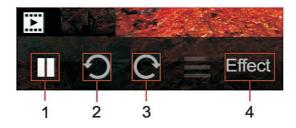
During playback, press the option button to display a dialog box with these options:

Item	Options
Repeat	Repeat lets you have the options to select the following:
	[Repeat Off] Turns off repeat.
	[Repeat One] Keep playing the same file over and over again.
	[Repeat All] Keep playing the files inside a selected folder over and over again.
	[Repeat Random] Keep playing the files inside a selected folder at random.
Time Search	This function lets you input the time in which you want to skip to when playing a file.

Item	Options
Subtitle Menu (Video only)	This function allows you to adjust the font size, select the font location, and select the font language. Some video may not support this function.
Select Track (Music only)	This function lets you jump to a selected track inside the selected folder.

■ Under Photo Playback

Photo slideshow



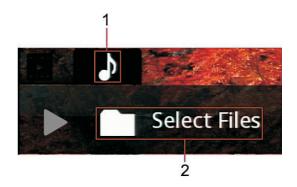
No.	Description
1	Pause or begin the photo slideshow.
2	Rotate the photo counter-clockwise.
3	Rotate the photo clockwise.
4	Add effects to the slideshow.

Slide Effect Setting



- **[Effect]** Off, Wipe Left, Wipe Right, Wipe UP, Wipe Down, Box In, Box Out, Blending, Blind Horizontal, Blind Vertical.
- [Interval] 3 sec, 5 sec, 10 sec, 20 sec, 30 sec, 1 min.
- [Repeat] Random Off, Random On.

Photo slideshow with music



No.	Description
1	Press the direction arrow to the right to select the music file to play during photo slideshow.
2	Select the folders containing the music files.

After selecting the folder, press the red button R to play all the music files inside the selected folder.



7

Advanced Operation

Special functions on Remote Control



During disc playback, pressing this button on the remote will show Picture-in-picture. This feature is only available if supported by the movie disc.



Resolution 🗐

During disc or video playback, pressing this button on the remote will change the resolution of the display.

Angle 🗔

During disc or video playback, press this button on the remote control to change the viewing angle of the movie. This feature is only available if supported by the movie disc.

Music Mode 🞵

During audio CD or music file playback, press this button on the remote control to invoke the equalizer menu. In the equalizer menu, you can select the preset music genre for your type of music or you could select a user defined option where you can change the equalizer of the music to suit your taste.



Splendid S

During disc or video playback, press this button on the remote control to invoke the Splendid menu. You can select a preset viewing environment for viewing your movie or video.



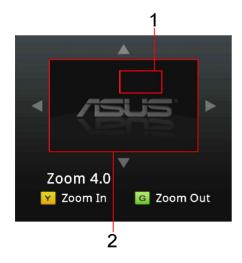
Dimmer 0

Pressing this button on the remote control will adjust the brightness of the LCD display on the front panel of your player.

Zoom

When viewing photo, press this button on the remote control to invoke the zoom function. Press





No.	Description
1	The small rectangle shows the location of the picture that is zoom in. Use $\uparrow, \downarrow, \leftarrow, \rightarrow$ in your remote to move the small rectangle.
2	The big rectangle is the whole picture.

Pure Audio

During video or music playback, pressing this button on the remote, the display will turn blank and only output audio. To turn the display back on, press this button again.

Title TITLE

During playback of a DivX file with multiple titles or editions, pressing this button on the remote control will cause the DivX file to start playback of the next title or edition.



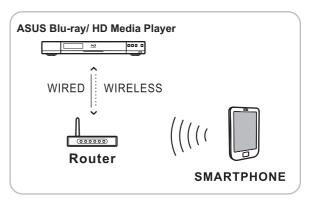
During playback of a video, music or photo file, press this button on the remote control to display the information of the file being played. Press this button again to remove the information being displayed.

Smartphone Remote Controller

If you have a smartphone which have a web browser, you can use it as a remote control for your player.

These conditions are needed so that you can use your smartphone as a remote control:

- Your player should be connected to a router (wired or wireless).
- Your smartphone should be connected to the same router as your player is.
- Your smartphone should have a web browser.
 Example: Safari, Webkit, etc.



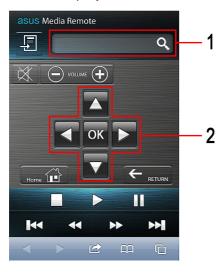
Follow the steps below to turn your smartphone into a remote control:

- 1. Turn your player on, then use the arrow key on your remote control to navigate to the setup menu and press **OK**.
- Navigate to Network and select Connection Status and press OK. Your TV will display the IP address of your player.



3. Launch the web browser application on your smartphone.

- 4. Key in the IP address of your player onto your web browser's URL.
- 5. Your smartphone's web browser will launch an application of the player's remote control.



No.	Description
1	To use the search function, first invoke the on screen keyboard by pressing the search bar under Internet service.
	Press the search bar on your smart phone to invoke its on screen keyboard.
	3. Key in the text on your smart phone.
	4. Press the Q icon on your smart phone, and all texts are displayed on the display devices.
2	This have the same functions as the directional keys on your remote control.

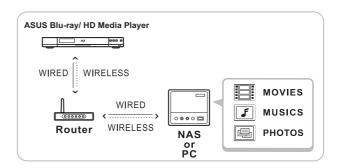
You can now use your smartphone as a remote control for your player.

DLNA operation

Your player is DLNA-certified which means that it can communicate with other DLNA-certified devices.

These conditions are needed to make the most out of your player's DLNA feature:

- Your player should be connected to a router (wired or wireless).
- Your DLNA-certified devices (NAS server, etc.) should be connected to the same router as your player.



If all the conditions are met, you can use your player to access your DLNA-certified device (example: NAS server) just like an external storage device.

Setup Menu



The Setup menu contains menu for settings and adjustments. Most of the contents in this menu are self-explanatory. The setup menu contains the following items:

Playback

Disc Menu Language - Select the default menu language for BD-Videos or DVD-Videos.

Audio Language - Select the track language for BD-Videos or DVD-Videos. The default is **Original**, which means that the language given priority in the disc is selected.

Subtitle Language - Select the subtitle language for BD-Videos or DVD-Videos. The default is Original, which means that the language given priority in the disc is selected.

Parental Control - Playback of some BD-Videos can be limited according to the age of the users. Scenes may be blocked or replaced with different scenes. Follow the on screen instructions and enter your four-digit password. The default password is 0000.

To change the password, navigate to Parental Control, then select Change Password and press **OK**. Key in the default password and then key in the new four-digit password twice and press OK. To modify the password, follow the same procedure as if you are changing your password, but instead of the default password, you should key in your old password.

If you forget your password, reset the player to the factory default setting. See Restore Factory Settings on page 27 for more information.

In the Parental Control menu, you can set the access to the disc by setting the ratings. There is an option to input the parental control area code for Blu-ray disc. See page 31 for the detailed list.

BD-Live Connection BD LIVE

BD-Live is a feature of Blu-ray in which a Blu-ray movie can download features or additional contents from the internet. You can enable or disable this feature. The default setting for this item is **Off**. See "Enjoying BD-LIVE" on page 17 for more information.

Video

TV System - The TV System lets you switch between the PAL and NTSC system. The default setting is set during the **Easy Setup Wizard**. See page 14 for more information.

TV Aspect Ratio - The TV Aspect Ratio lets you switch between available aspect ratio. See "Easy Setup Wizard" on page 14 for more information.

Resolution - This menu lets you select the screen resolution of the video supported.

1080p 24Hz

- Auto Outputs 1920 x 1080p/24 Hz video signals only when connecting a 1080/24pcompatible TV using the HDMI Out jack. This is the default setting in your player.
- Off Select this when your TV is not compatible with 1080/24p video signals.

HDMI Deep Color - Deep Color expands the colors on the display from millions to billions. You have the option to set the HDMI Deep Color to Auto or Off.

- Auto This is the default setting in your player.
 Normally select this.
- Off Select this when the picture is unstable or colors appear unnatural.

x.v.Colour - x.v. Colour is a color space that can be used in the video electronics of television sets to support a gamut 1.8 times as large as that of the sRGB color space. You have the option to set the x.v.Color to Auto or Off. The default setting is **Auto**.

BD 3D Mode

- Auto This is the default setting in your player.
 Normally select this.
- Off Select this to display all content in 2D.

Splendid Menu - The Splendid Menu lets you select the different ways your video is displayed. In this menu, you can adjust the contrast, brightness, tint, etc. of your video. The default is **Standard**.

Audio

HDMI Output - The default setting for this function are set during the Easy Setup Wizard. See "Audio Output Resolution" on page 35 for more information.

SPDIF Output

- Primary Pass Through if your audio output device (i.e. amplifier) supports the pass through function.
- DTS Re-Encode transforms audio to DTS raw data for TV/AV receiver or any device with SPDIF input.
- PCM Stereo Select this item if you connect this unit's HDMI Out or Digital Audio Out jack to a device with two-channel digital stereo decoder. This is the default setting in your player.

Dynamic Range Control - You can listen at low volumes but still hear dialog clearly. (Dolby Digital, Dolby Digital Plus and Dolby TrueHD only). **Auto** is effective only when playing Dolby TrueHD. The options for Dynamic Range Control are Auto, On, or Off. The default setting is **Auto**.

PCM Output Rate Limit (Coaxial/Optical)

- 48 KHz Select this if your A/V receiver or amplifier is not capable of handling 192 KHz and 96 KHz signal. When this choice is made, this unit automatically converts any 192 KHz and 96 KHz signals to 48 KHz so your system can decode them.
- 96 KHz Select this if your A/V receiver or amplifier is not capable of handling 192 KHz signal. When this choice is made, this unit automatically converts any 192 KHz signals to 96 KHz so your system can decode them.
- 192 KHz Select this if your A/V receiver or amplifier is capable of handling 192 KHz signals.

Speaker Setup - Depending on your speaker setup, you can select 2.1, 3.1, 5.1 or 7.1 Channels. See "Speaker Setup (Under PCM Multi-channel mode)" on page 36 for more information.

Music Mode - Music Mode is a preset environment for the type of music you are playing. You can select Rock, Classic, Jazz, Bypass or User Defined as your music mode.

Neo6

Press **OK** to invoke this feature.

- Enable Outputs simulated multichannel sound from 2 channel sources via the HDMI Out jack according to the capability of the connected device using DTS Neo6.
- Disable Outputs sound with its original number of channels via the HDMI Out jack.

Enable this if your speaker setup supports this feature. The default setting in your player is **Disable**. Press **OK** to edit.

Network

IP Configuration - This menu lets you choose Wired or Wireless network connections.

Connection Status - The Connection Status displays the status of the network connection.

Network Diagnostic - is used to check is if the network connection has been made.

Other

DivX Registration - When playing a DivX VOD content for the first time, you will be asked to register your player with DivX.



10 alphanumeric characters

Use the 10 alphanumeric characters to register at DivX website.

After playing a DivX VOD content for the first time, the registration code is not displayed. If you purchase a DivX VOD content using a registration code different from your player's code, you will not be able play this content.

To cancle your player's DivX registration, select **Deregister**.

OSD Language - This menu lets you set the language of the on screen display. The default is set during the Easy Setup Wizard. See page 14 for more information.

Auto Power Off - If this feature is enabled, when the player is inactive for 25 minutes, and there are still no activities (no button pressed, no disc, video, music or photo playback), the player will automatically turn off. The default setting is **Off**.

BD Storage Select - This menu lets you select USB external devices or Local Storage for storing BD-LIVE contents. The default setting is **Local Storage**.

BD Storage Clear - Lets you clear BD-LIVE contents in the built-in memory.

HDMI CEC - HDMI Consumer Electronics Control (CEC) is a feature designed to allow the user to command and control two or more CEC-enabled boxes connected through HDMI to use only one of their remote controls (e.g. controlling a Television set, Set-top box and Blu-ray/DVD player using only the remote control of the TV). CEC also allows for individual CEC-enabled devices to command and control each other without user intervention. The default setting is Off.

Firmware Update - This menu lets you choose if you want to update your firmware via disc, USB, or internet. See "Updating the Firmware" on page 28 for more information.

Restore Factory Settings - It will reset the player's factory settings.



Warning: All data in the built-in memory will be deleted.

About - This menu displays the current firmware version of the player.

8

Appendix

Maintenance

Notes on Discs

Handling Discs

Do not touch the playback side of the disc. Hold the disc by the edges so that fingerprints do not get on the surface. Never stick paper or tape on the disc.

Storing Discs

After playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat and never leave it in a parked car exposed to direct sunlight.

Cleaning Discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center to out.

Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

■ Handling the Unit

When shipping the unit

Please save the original shipping carton and packing materials. If you need to ship the unit, for maximum protection, re-pack the unit as it was originally packed at the factory.

- Keeping the exterior surfaces clean. Do not use volatile liquids such as insecticide spray near the unit.
- Wiping with strong pressure may damage the surface.
- Do not leave rubber or plastic products in contact with the unit for a long period of time.

Cleaning the unit

To clean the player, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly

moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

Maintaining the Unit

The unit is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality could be diminished. For details, please contact your nearest authorized service center.

Updating the Firmware

Manual Update

- 1. On a computer, go to http://support.asus.com and input your player's model number and check if there are any newer firmware version available.
- If a newer firmware version is available, download it into your computer. If the file is compressed, uncompressed it and copy it into a USB flash drive's root menu.
- 3. Insert the USB flash drive into your player's available USB port.
- 4. Turn on your player and navigate to **Home**, then **Setup** and **Other**.
- 5. In the **Other** menu, select the **Firmware Update** and press → on your remote control.
- 6. Follow the onscreen instruction and update the firmware.



Warning: Do not turn off your player while the firmware is being updated. If your output source is a HDMI cable, don't switch the output source while updating your firmware.

After the firmware is finished updating the player will reboot. The new firmware version will take effect.

Online Update

- 1. Turn on your player and navigate to **Home**, then **Setup** and **Other**.
- 2. In the **Other** menu, select the **Firmware Update** and press → on your remote control.
- Select the firmware update "Via Internet" and follow the onscreen instruction and update the firmware.

4. The player will connect to ASUS server, download the newest firmware and update the firmware automatically.



Note: Make sure that you are connected to the Internet before updating the firmware via online.



Warning: Do not turn off your player while the firmware is being updated.

After the firmware is finished updating the player will reboot. The new firmware version will take effect.

Troubleshooting

Symptom	Possible Cause	Solution
General		
No power	Power cable is not properly connected	Plug the power cord into the wall outlet securely.
No Disc or Unknown Disc error	No disc or incompatible disc loaded in player	Eject disc and check. See "Playable Discs" on page 1 for more information.
	Dirty disc recording surface	Eject the disc and clean any dirt or fingerprints.
	Disc not properly loaded	Eject disc and make sure the label side is facing up and the record side is facing down.
Disc does not play	Check the region code of the BD-Video and DVD-Video.	Use the correct region code of the BD-Video and DVD-Video. See "Region Code" on page 18 for more information.
Remote control failure	Remote control is too far from the player or the receiver on your player is blocked.	Use the remote control within the effective range.
	Low battery	Replace the batteries.
Picture		
No picture	Video cable is not properly connected	Check video cable, make sure the color of the plugs match the jacks on both ends, and then reconnect if necessary.
	TV/Display input is not correctly selected	Select the input to which the player is connected.
	The selected resolution is not capable with your TV.	Connect CVBS to your display device, change a proper output resolution that is supported by your display device.
	The PURE AUDIO button might have been pressed.	Press the PURE AUDIO button 🖾 again.
Incorrect color	Incorrect video cable connection	If using component / composite cables, check all cables to make sure the signals match on both ends.
Sound		
No sound	Audio cable is not properly connected	Check audio cable, make sure the color of the plugs match the jacks on both ends, and then reconnect if necessary.
	Mute is activated	Press the MUTE button to cancel the mute.
	Volume is too low	Press the volume up button to increase the volume to maximum.
Network		
Can not connect to the network	LAN cable is not properly connected	Check that the LAN cable is properly connected.
	The modem or broadband router power is not properly turned on	Turn the power on for each device.
	The broadband router and/or modem cable is not correctly connected	Check the operating instructions for each device and connect accordingly.

Parental Control Area Code

Afghanistan 0004 Liberia 0430 Aland Islands 0248 Libyan Arab Jamahiriya 0434 Jamahiriya Albania 0008 Liechtenstein 0438 Jamahiriya Algeria 0012 Lithuania 0440 Jamahiriya Angeria 0012 Lithuania 0440 Jamahiriya Andorra 0020 Macadonia, the former Yugoslav Republic of 0450 Jamahiriya Angola 0024 Macadonia, the former Yugoslav Republic of 0450 Jamahiriya Angolilla 0660 Madagascar 0450 Jamahiriya Antercica 0010 Malawi 0454 Jamahiriya Argentina 0032 Maldives 0462 Jamahiriya Austrialia 0036 Marshall Islands 0584 Jamahiriya Austrialia 0036 Marshall Islands 0584 Jamahiriya Austrialia 0040 </th <th>Area</th> <th>Code</th> <th>Area</th> <th>Code</th>	Area	Code	Area	Code
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Chile 0152 Pakistan 0586				
China 0156 Palau 0585	China	0156	Palau	0585

Area	Code	Area	Code
Christmas Island	0162	Palestinian	0275
Omiomiao lolana	0.02	Territory, Occupied	02.0
Cocos (Keeling)	0166	Panama	0591
Colombia	0170	Papua New Guinea	0598
Comoros	0174	Paraguay	0600
Congo	0178	Peru	0604
Congo, the	0180	Philippines	0608
Democratic Republic of the	0.00	Титрриноо	0000
Cook Islands	0184	Pitcairn	0612
Costa Rica	0188	Poland	0616
Cte d'Ivoire	0384	Portugal	0620
Croatia	0191	Puerto Rico	0630
Cuba	0192	Qatar	0634
Cyprus	0196	Runion	0638
Czech Republic	0203	Romania	0642
Denmark	0208	Russian Federation	0643
Djibouti	0262	Rwanda	0646
Dominica	0212	Saint Barthlemy	0652
Dominican Republic	0214	Saint Helena, Ascension and Tristan da Cunha	0654
Ecuador	0218	Saint Kitts and Nevis	0659
Egypt	0818	Saint Lucia	0662
El Salvador	0222	Saint Martin (French part)	0663
Equatorial Guinea	0226	Saint Pierre and Miquelon	0666
Eritrea	0232	Saint Vincent and the Grenadines	0670
Estonia	0233	Samoa	0882
Ethiopia	0231	San Marino	0674
Falkland Islands (Malvinas)	0238	Sao Tome and Principe	0678
Faroe Islands	0234	Saudi Arabia	0682
Fiji	0242	Senegal	0686
Finland	0246	Serbia	0688
France	0250	Seychelles	0690
French Guiana	0254	Sierra Leone	0694
French Polynesia	0258	Singapore	0702
French Southern Territories	0260	Slovakia	0703
Gabon	0266	Slovenia	0705
Gambia	0270	Solomon Islands	0090
Georgia	0268	Somalia	0706
Germany	0276	South Africa	0710
Ghana	0288	South Georgia and the South Sandwich Islands	0239
Gibraltar	0292	Spain	0724
Greece	0300	Sri Lanka	0144
Greenland	0304	Sudan	0736
Grenada	0308	Suriname	0740
Guadeloupe	0312	Svalbard and Jan Mayen	0744
Guam	0316	Swaziland	0748
Guatemala	0320	Sweden	0752
Guernsey	0831	Switzerland	0756
Guinea	0324	Syrian Arab Republic	0760
Guinea-Bissau	0624	Taiwan	0158
Guyana	0328	Tajikistan	0762

Area	Code	Area	Code
Haiti	0332	Tanzania, United	0834
		Republic of	
Heard Island and McDonald Islands	0334	Thailand	0764
Holy See (Vatican City State)	0336	Timor-Leste	0626
Honduras	0340	Togo	0768
Hong Kong	0344	Tokelau	0772
Hungary	0348	Tonga	0776
Iceland	0352	Trinidad and Tobago	0780
India	0356	Tunisia	0788
Indonesia	0360	Turkey	0792
Iran, Islamic Republic of	0364	Turkmenistan	0795
Iraq	0368	Turks and Caicos Islands	0796
Ireland	0372	Tuvalu	0798
Isle of Man	0833	Uganda	0800
Israel	0376	Ukraine	0804
Italy	0380	United Arab Emirates	0784
Jamaica	0388	United Kingdom	0826
Japan	0392	United States	0840
Jersey	0832	United States Minor Outlying Islands	0581
Jordan	0400	Uruguay	0858
Kazakhstan	0398	Uzbekistan	0860
Kenya	0404	Vanuatu	0548
Kiribati	0296	Venezuela, Bolivarian Republic of	0862
Korea, Democratic People's Republic of	0408	Viet Nam	0704
Korea, Republic of	0410	Virgin Islands, British	0092
Kuwait	0414	Virgin Islands, U.S.	0850
Kyrgyzstan	0417	Wallis and Futuna	0876
Lao People's Democratic Republic	0418	Western Sahara	0732
Latvia	0428	Yemen	0887
Lebanon	0422	Zambia	0894
Lesotho	0426	Zimbabwe	0716

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Video Output Resolution

		НОМІ	Component	Composite
NTSC	Auto (HDMI only)	Dependent on TV Beat resolution	Follow HDMI ^a	480i
	480i	480i	480i	480i
	480p	480p/60Hz	480p/60Hz	480i
	720p	720p/60Hz	720p/60Hz	480i
	1080i	1080i/60Hz	1080i/60Hz	480i
	1080p	1080p/60Hz	1080i/60Hz	480i
PAL	Auto (HDMI only)	Dependent on TV Beat resolution	Follow HDMI ^b	576i
	576i	576i	576i	576i
	576p	576p/50Hz	576p/50Hz	576i
	720p	720p/50Hz	720p/50Hz	576i
	1080i	1080i/50Hz	1080i/50Hz	576i
	1080p	1080p/50Hz	1080i/50Hz	576i

a. If HDMI is 1080p/1080i, the Component output is 1080i. Other resolution is the same HDMI.

When playing copy-protected media with HDMI cable plugged into the display device:

		НОМІ	Component	Composite
NTSC	Auto (HDMI only)	Dependent on TV Beat resolution	Disable	480i
	480i	480i	Disable	480i
	480p	480p/60Hz	Disable	480i
	720p	720p/60Hz	Disable	480i
	1080i	1080i/60Hz	Disable	480i
	1080p	1080p/60Hz	Disable	480i
PAL	Auto (HDMI only)	Dependent on TV Beat resolution	Disable	576i
	576i	576i	Disable	576i
	576p	576p/50Hz	Disable	576i
	720p	720p/50Hz	Disable	576i
	1080i	1080i/50Hz	Disable	576i
	1080p	1080p/50Hz	Disable	576i

b. Some TV won't support 1080p selection under component output.

When playing DivX® copy-protected file using a component or composite connection with HDMI cable unplugged:

		Component	Composite
NTSC	Auto (HDMI only)	N/A	N/A
	480i	480i	480i
	480p	480i	480i
	720p	480i	480i
	1080i	480i	480i
	1080p	480i	480i
PAL	Auto (HDMI only)	N/A	N/A
	576i	576i	576i
	576p	576i	576i
	720p	576i	576i
	1080i	576i	576i
	1080p	576i	576i

Audio Output Resolution

	Analog	HDMI			SPDIF	
	2CH Output	PCM Stereo	Multi- Channel PCM	Primary Pass- Thru	PCM Stereo	Primary Pass-Thru
Dolby Digital	Analog 2CH	PCM 2ch	PCM 5.1ch	Dolby Digital	PCM 2ch	Dolby Digital
Dolby Digital Plus	Analog 2CH	PCM 2ch	PCM 7.1ch	Dolby Digital Plus	PCM 2ch	Dolby Digital
Dolby TrueHD	Analog 2CH	PCM 2ch	PCM 7.1ch	Dolby TrueHD	PCM 2ch	N/A
DTS	Analog 2CH	PCM 2ch	PCM 5.1ch	DTS	PCM 2ch	DTS
DTS-HD	Analog 2CH	PCM 2ch	PCM 7.1ch	DTS-HD	PCM 2ch	N/A
Linear PCM 2ch	Analog 2CH	PCM 2ch	PCM 2ch	Linear PCM 2ch	PCM 2ch	Linear PCM 2ch
Linear PCM 5.1ch	Analog 2CH	PCM 2ch	PCM 5.1ch	Linear PCM 5.1ch	PCM 2ch	Linear PCM 5.1ch
Linear PCM 7.1ch	Analog 2CH	PCM 2ch	PCM 7.1ch	Linear PCM 7.1ch	PCM 2ch	N/A

Speaker Setup (Under PCM Multi-channel mode)

			Media Source Channels	
		2.1	5.1	7.1
Speaker Setup	7.1	7.1 channels PCM output, in which audio signals are only on 2.1 channels.	7.1 channels PCM output, in which audio signals are only on 5.1	7.1 channels PCM output.
	5.1	offiny off 2.1 channels.	channels.	7.1 channels PCM output, in which audio signals are only on down mixed 5.1 channels.
	3.1		7.1 channels PCM output only on down mixed 3.1 c	in which audio signals are hannels.
	2.1	2.1 channels PCM output	Down mixed 2.1 channels	s PCM output.

File Format Support and Limitation

Supported file system: EXT3, FAT16, FAT32, NTFS

AV File Format

Avi

[Supported video format]

- MPEG2 HP@HL
- MPEG4 SP, MPEG4 ASP(GMC 0, 1p) (Xvid)
- (DivX 3.11, 4, 5, 6)
- H.264(AVC) HP@Up to Level 4.1
- H.264(AVC) MP@L4.1
- H.264(AVC) BP@L3.1
- WMV3 (WMV9 MP)

[Supported Audio Formats]

- Dolby AC3
- DTS
- PCM
- MP3
- AAC
- HE-AAC
- MPEG Audio

[Supported Subtitle Formats]

• External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub

Internal: SSA, ASS, SRT, Vobsub

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to 19.4mbps
- 4. Support variable and constant bit rate
- 5. Some files with DRM can't support video preview

DivX®

[Suported Video Formats]

- MPEG4 ASP(GMC 0, 1p) (Xvid)
- (DivX 3.11, 4, 5, 6)

[Supported Audio Formats]

- Dolby AC3
- MPEG Audio
- PCM

[Supported Subtitle Formats]

External: SRT, VobSub

• Internal: XSUB

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to 8mbps
- 4. Support variable and constant bit rate
- 5. Some files with DRM can't support video preview

Mkv

[Suported Video Formats]

- MPEG1
- MPEG2 HP@HL
- MPEG4 SP, MPEG4 ASP(GMC 0, 1p) (Xvid)
- H.264(AVC) HP@Up to Level 4.1
- WVC1(WMV9 AP)

[Supported Audio Formats]

- Dolby AC3
- AAC
- DTS
- PCM
- MPEG Audio

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: SSA, ASS, SRT, Vobsub

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to 15mbps
- 4. Support variable and constant bit rate

Ts (m2t)

[Supported Video Formats]

- MPEG2 HP@HL
- H.264(AVC) HP@Up to L4.1
- H.264(AVC) MP@L4.1
- H.264(AVC) BP@L3.1
- WVC1(WMV9 AP)

[Supported Audio Formats]

- Dolby AC3
- MPEG Audio
- LPCM
- DTS
- AAC
- HE-AAC

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: No

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps

- 3. Bit rate up to 50.1mbps
- 4. Support variable and constant bit rate

Mt2s (.mts)

[Supported Video Formats]

- MPEG2 HP@HL
- H.264(AVC) HP@Up to Level 4.1
- H.264(AVC) MP@L4.1
- H.264(AVC) BP@L3.1
- WVC1(WMV9 AP)

[Supported Audio Formats]

- Dolby AC3
- DTS
- LPCM
- Audio identical to BD disc support

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: PGS

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bt rate up to 52.8mbps
- 4. Support variable and constant bit rate

Mpg, Vob, Mpeg

[Supported Video Formats]

- MPEG1
- MPEG2 HP@HL

[Supported Audio Formats]

- Dolby AC3
- DTS
- MPEG Audio
- LPCM
- PCM

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: No

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to
 - .mpg/.mpeg: 19.4mbps
 - .vob: 28.9mbps
- 4. Support variable and constant bit rate

Wmv/Asf

[Supported Video Formats]

WMV3 (WMV9 MP)

WVC1 (WMV9 AP)

[Supported Audio Formats]

WMA9

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: No

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to 6.5mbps
- 4. Support variable and constant bit rate

Mov, Mp4, 3gp, M4v

[Supported Video Formats]

- MPEG2 HP@HL
- MPEG4 SP, MPEG4 ASP(GMC 0, 1p) (Xvid) (Support B-VOP)
- H.264(AVC) HP@Up to Level 4.1
- H.264(AVC) MP@L4.1
- H.264(AVC) BP@L3.1

[Supported Audio Formats]

- Dolby AC3
- MPEG4(AAC)
- PCM
- MPEG1 Layer 1/2/3

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: No

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Bit rate up to
 - .mov: 52.6mbps
 - .mp4/.m4v: 24.1mbps
 - .3gp: 520kbps
- 4. Support variable and constant bit rate

Flv

[Supported Video Formats]

- H.264(AVC) HP@Up to Level 4.1
- H.264(AVC) MP@L4.1
- H.264(AVC) BP@L3.1
- VP6

[Supported Audio Formats]

- MPEG4(AAC)
- MPEG1 Layer 3

[Limitations]

- 1. Support resolution up to 1920x1080
- 2. Support frame rate up to 60fps
- 3. Tested bit rate up to 10.5mbps
- 4. Support variable and constant bit rate
- 5. VP6 video supports D1 resolution

Rmvb

[Supported Video Formats]

Real Video 8, 9, 10

[Supported Audio Formats]

Real Audio 8 LBR, HE-AAC

[Supported Subtitle Formats]

- External: MicroDVD, SRT, SSA, ASS, Subview, Vobsub
- Internal: No

[Limitations]

- 1. Support resolution up to 720x480
- 2. Support frame rate up to 30fps
- 3. Bit rate up to 905kbps
- 4. Support variable and constant bit rate

■ Audio File Formats:

Mp3

[Supported Audio Formats]

MPEG1 Layer1/2/3

[Limitations]

- 1. Sample rate 48KHz
- 2. Channel support up 2CH
- 3. Mono/Stereo downmix method is supported

Wma

[Supported Audio Formats]

- WMA
- WMA Pro
- WMA Lossless

[Limitations]

- 1. Sample rate 96KHz
- 2. For Pro/Lossless, support up to 2CH
- 3. Mono/Stereo downmix method is supported

Flac

[Supported Audio Formats]

flac

[Limitations]

- 1. Sample rate 192KHz
- 2. Channel support up 8CH
- 3. Mono/Stereo downmix method is supported

Aac

[Supported Audio Formats]

- AAC-LC (MPEG2, MPEG4)
- HE-AAC (v1, v2)

[Limitations]

- 1. Sample rate 96KHz
- 2. Channel support up 8CH
- 3. Mono/Stereo downmix method is supported

Ogg

[Supported Audio Formats]

VORBIS

[Limitations]

- 1. Up to 48KHz/6CH or 96KHz/2CH
- 2. Mono/Stereo downmix method is supported

Wav

[Supported Audio Formats]

Raw PCM

[Limitations]

- 1. Sample rate 192KHz
- 2. Bit depth 8/16/24 bit
- 3. Channel support up to 6CH
- 4. Mono/Stereo downmix method is supported

Ac3

[Supported Audio Formats]

ac3

[Limitations]

- 1. Sample rate 48KHz
- 2. Channel support up to 6CH(8ch for dd+)
- 3. Mono/Stereo downmix method is supported

Mka

[Supported Audio Formats]

- Dolby AC3
- AAC
- DTS
- PCM
- MPEG Audio

[Limitations]

1. Follow the limitation of the supported audio codec

2. Multi-Track feature is not supported.

Aiff

[Supported Audio Formats]

Raw PCM

[Limitations]

- 1. Sample rate 192KHz
- 2. Bit depth 8/16/24 bit
- 3. Channel support up to 6CH
- 4. Mono/Stereo downmix method is supported

M4a

[Supported Audio Formats]

- Dolby AC3
- MPEG4(AAC)
- MPEG1 Layer 1/2/3

[Limitations]

Follow the limitation of the supported audio codec

Dts

[Supported Audio Formats]

DTS

[Limitations]

- 1. 192KHz up to 6ch or 96KHz up to 8ch,
- 2. Bit depth 16/20/24 bit
- 3. Mono/Stereo downmix method is supported

■ Picture File Formats

Bmp

[Limitations]

- 1. Support up to 24MPixels
- Not supported: RLE compressed, OS/2 style, g16def555, g16bf555, g16bf565

Jpg, Png, Gif

[Limitations]

Support up to 24MPixels

Tif, Tiff

[Limitations]

JPEG compression not supported

■ Subtitle File Formats

PGS

[Supported Video Formats]

m2ts, BD

[Limitations]

Cannot adjust size and location

Sub+IDX, Smi, Srt, Ssa/Ass

[Limitation]

Encodings supported for subtitles:

Unicode: UTF8, UTF16 BE, UTF16LE

ANSI: GB2312, GB18030, BIG5, SHIFT_JIS, EUC_KR

[Limitations of text subtitle decoder]

- 1. Currently the max subtitle files size supported is 512KB, this value is configurable. If the file size is greater than 512KB, the decoder will discard any data fed after the 512K size.
- 2. All styling information in the subtitle will be discarded.
- 3. Max 12 lines of text subtitles can be displayed on screen for each dialogue. If a subtitle contains a dialogue which has more than 12 text lines after wrapping is applied, only the first 12 lines will be displayed.
- 4. Max 1023 characters are supported for each line. If a text line has more than 1023 characters, only the first 1023 characters will be displayed.
- 5. For SAMI, max 8 subtitle tracks are supported in one .smi subtitle file. The Source ID lines are not supported.

■ ISO file and Others

BD-ISO, DVD-ISO (vob+ifo), file folder playback as a disc (with a BDMV/Video_TS subfolder inside)

- 2D BD ISO
- 3D BD ISO
- All available Blu-ray menu features

■ Disc Support BD Media

BD-Rom

Supported BD Profile: Profile 1.0/1.1/2.0/5.0

BD-RE SL, DL

Supported Video Formats: Ver.3

BD-R SL, DL

Supported Video Formats: Ver.2 (Including LTH type)

BD-3D

[Limitations]

Support Profile 5.0 (BD-3D), up to 1080p24.

■ Disc Support DVD Media

DVD-Video SL/DL, DVD-ROM SL/DL, DVD+R/RW SL/DL, DVD-R/RW SL/DL $\,$

■ Disc Support CD Media

CD-DA, CD-R/CD-RW

Others

AVCHD, BD managed copy disc

Product Specifications

I/O Ports	 [Rear I/O] RCA Jack x3 for Component Y/PB/PR. RCA Jack x3 for CVBS/Audio-R/Audio-L. HDMI Port x 2 for BDS-700 HDMI Port x 1 for BDS-500 Optical S/PDIF Out x1 Coaxial S/PDIF Out x1 IEC C14 AC input INLET x1 USB port x1 10/100M Ethernet port x1 [Front I/O] USB port x1
Video Output Support	 CVBS - NTSC/PAL system Component video - 480i, 480p, 576i, 576p, 720p, 1080i HDMI with HDCP - 480i, 480p, 576i, 576p, 720p, 1080i, 1080p
Audio Output Support	 Analog R/L Stereo audio out Optical and Coaxial SPDIF audio out
Wireless LAN (BDS-700 only)	[WLAN Standard] • IEEE 802.11b/g/n 1T1R RF Frequency Range: • 2.4~2.5GHz
	[WLAN Security]WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES)
Built-in Memory	 WEP 64/128, WPA-PSK (TKIP/
	WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) GB (Actual storage varies due to
Memory Input Power	WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) GB (Actual storage varies due to system usage)
Input Power Requirements	 WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) 2 GB (Actual storage varies due to system usage) 100~240 VAC, 50/60 Hz 28W for BDS-700
Input Power Requirements Power Consumption Operating	 WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) 2 GB (Actual storage varies due to system usage) 100~240 VAC, 50/60 Hz 28W for BDS-700 27W for BDS-500
Input Power Requirements Power Consumption Operating Temperature Operating	 WEP 64/128, WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) 2 GB (Actual storage varies due to system usage) 100~240 VAC, 50/60 Hz 28W for BDS-700 27W for BDS-500 0°C~40°C

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Version 2, June 1991

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